



*Smart Shift*TM



Service Manual

Smart Shift™ Service Manual

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Smart Shift™ Reels

Service Manual

General Maintenance

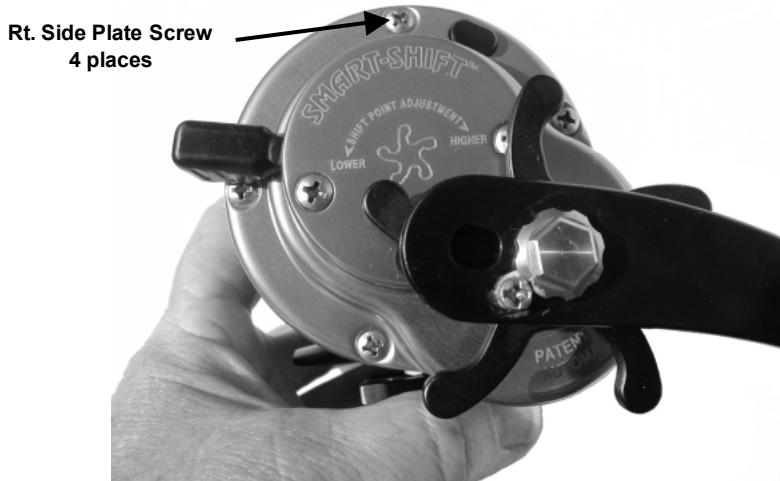
Section 1.0

1.1 Cleaning the Exterior of the Reel

Salt water is a highly corrosive agent that can ruin the finish and performance of the reel. Microscopic deposits of salts and other minerals found in sea water will adhere to external and internal parts of the reel after the water has evaporated. It is important to clean the reel after each use or exposure to these elements.

Wash the exterior of the reel with a mild soap solution and fresh water. Hand wash the entire reel with a rag or sponge taking care to remove all salt deposits from the corners and crevices of the reel parts. Pay particular attention to salt deposits that gather around the heads of screws and where screws and other hardware connect to the aluminum reel parts. Rinse in fresh water until all soap residue is gone.

Power-washing the reel with a high-pressure hose is not recommended, as it will sometimes force salts into the interior of the reel. If power-washing is the only means available of washing the reel, it is preferred over not washing the reel at all.

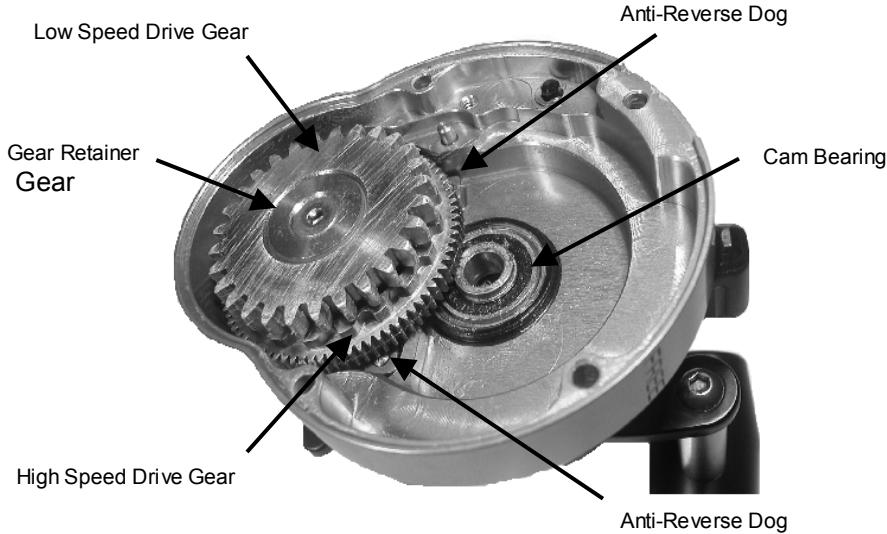


1A

1.2 Inspecting Inside the Right Side Plate

Loosen the four right side plate screws with a #2 Phillips screw driver. The side plate screws are located around the outer perimeter of the side plate. See Figure 1A. Remove the 4 screws completely from the right side plate and set them aside. Remove the harness lug (or plug) from the frame and set it aside also.

Lift the right side plate off of the reel frame. When you separate the right side plate assembly from the frame, the pinion gear may come out of the spool and remain in the side plate engaged to the other gears in the transmission. The pinion gear will otherwise remain engaged with the spool. With the exception of the side plate screws and harness lug, the pinion gear is the only part that should be "free" after you remove the side plate assembly. Inspect the inside of the side plate for signs of salt and/or corrosion. See Figure 1B.



1B

1.3 Cleaning the Right Side Plate Assembly

Wipe clean any water or salt deposits you may find on the side plate, cam bearing or transmission parts. Use a paper towel, rag or Q-Tip to absorb any standing water. Inspect the anti-reverse dogs and other "hard to see" areas of the assembly. If you find water and corrosion deep inside the transmission assembly (between the drive gears) or around the anti-reverse dogs, and feel it is necessary to remove the transmission parts, please refer to section 3.0 of this manual.

1.4 Lubricating the Right Side Plate Assembly

Use a light oil or corrosion preventative lubricant to coat the inside of the right side plate. This light coating of oil will serve as a corrosion barrier and help displace any water that may enter the reel. We use "Corrosion X" at the factory for initial assembly. Apply the oil with a spray bottle, brush or swab, being careful not to apply too much. A heavy coat of oil may tend to contaminate the clutch elements of the SST transmission, and will result in sub-standard shift point performance. Use only enough light oil to leave a thin film on all of the parts.

Under normal use conditions and for routine inspection and service, the SST transmission does not require heavy lubrication. If inspection of the reel reveals a clean interior, and total tear-down of the transmission is not in order, there are only a few areas of the transmission that require attention.

Check the low speed drive gear for smoothness of rotation. Refer to Figure 1B. Lightly press on the face of the low speed gear with your fingertip and rotate it forward, or in a counterclockwise direction as you are facing it. The gear should rotate smoothly and you should be able to feel and hear the ratcheting action of the drive disc behind the gear. You should not be able to rotate the gear backwards, or in a clockwise direction without it locking into the drive disc and coming to a hard stop.

Lube the low speed gear axle by placing one or two drop of light oil on the face of the gear near the outer edge of the brass low gear retainer. Rotate the gear with your finger to help the oil migrate to the axle and bore area.

Lube the two anti reverse dogs by applying one or two drops of light oil on each dog. Apply the oil to the top of the dog pins so that it will migrate down the pins into the holes in the dogs.

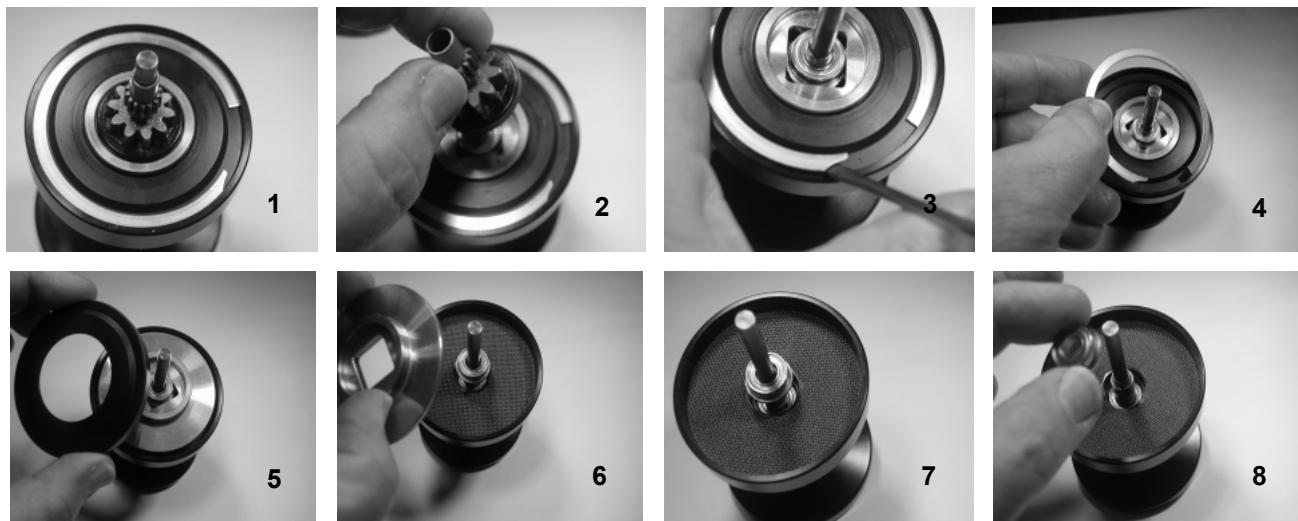
Lube the gears of the SST transmission by applying a light coating of lithium-based grease to the pinion gear only. During normal operation, the pinion gear will transfer the grease to the entire circumferences of both the low speed and high speed gears. Avoid applying heavy grease to the gears. Excessive grease can migrate into areas of the transmission where it can cause problems.

1.5 Inspecting the Drag Assembly

The drag assembly is located in the right side of the spool under the drag cover. Lift the spool assembly out of the frame. Disassemble the drag system by removing the pinion gear, drag cover retainer, drag cover and drag plate from the right side of the spool. Use a small flat blade screwdriver or an awl to pry the drag

cover retaining ring out of the ring groove. Once you get it started, it should come all of the way out of the groove by hand. Refer to Figure 1C, steps 1 through 8.

Inspect the carbon drag element for the presence of water or unwanted grease. Remove the pinion bearing and drag plate spring if necessary. Note that the pinion bearing is installed with the flanged side facing the drag element.



1C

1.6 Cleaning the Drag Assembly

Wipe the surface of the drag element clean with a clean rag or paper towel. There will normally be some black carbon dust present on the drag element. The carbon dust is a result of normal wear. If the drag system was previously assembled as a "wet" system where a drag grease was applied, the carbon dust may be suspended in the grease, or imbedded in the drag element surface with the grease. Again, clean the element surface with a rag or paper towel. DO NOT use a solvent to clean the drag element. Some solvents can damage the epoxy bonding agents of the drag element.

1.7 Inspecting the Spool Bearings

With the drag assembly out of the spool, remove the clicker gear from the left side of the spool. Use a #1 Phillips screwdriver to remove the two clicker gear mounting screws. Pull the spool shaft out of the spool from the left end after you have removed the clicker gear. Refer to Figures 1D and 1E. One of the spool bearings is mounted on the left end of the spool shaft and the other will either remain in the right end of the spool or fall out on the table when you remove the spool shaft. If the right side bearing remains in the spool, push it out with a small screwdriver or the end of the spool shaft you just removed. Both of the spool bearings are a slip fit into the spool and should not be tight in the bores.



1D



1E

Inspect the bearings for the presence of water or corrosion. Roll the bearing between your fingers to feel for rough spots or stiffness. If the bearings are rough, they should be replaced. If they are stiff, they may

only need to be cleaned. If necessary, the bearing on the left end of the spool shaft can be removed by pushing the "C" clip retainer off of the shaft and sliding the bearing off. When you reinstall the bearing back onto the shaft, be sure that the four Belville washers are installed "cup to cup" in pairs. If the assembly is correct, there will be no clearance between the bearing and the Belville washers once the "C" clip is installed.

1.8 Cleaning the Spool Bearings

Spool bearings that are stiff from the presence too much grease or dried lubricants, can be cleaned with solvent or a light machine or reel oil. Soak the bearings until the old grease is dissolved. If the bearings are cleaned with a solvent, it is important to make sure that all of the solvent is gone out of the bearings before they are lubricated and reinstalled. The use of compressed air to flush the solvent out of the bearings is a good way to clean and dry them.

1.9 Lubricating the spool bearings

There are two schools of thought when it comes to lubrication the spool bearings. One is to "pack" the bearings in grease to help prevent any water from entering them. This is especially helpful if a reel is to be used for long periods of time without maintenance. The second option is to lube the spool bearings for maximum free spool performance. Heavy grease will hinder the ability of the spool to roll freely and will ultimately degrade the free spool performance of the reel. If maximum free spool performance is desired, lubricate the bearings with a small amount of light reel oil only. The bearings are shielded and not sealed, so a drop or two of light oil on each bearing will be enough to lube them efficiently.

1.10 Inspecting Inside the Left Side Plate

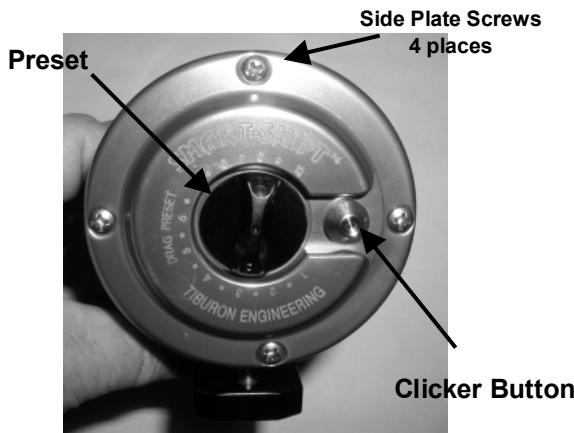
If the reel is already open from the right side, remove the spool to inspect the inside of the left side plate. If the reel is not already open from the right side, the left side plate can be removed for inspection. Loosen the four left side plate screws with a #2 Phillips screw driver. The side plate screws are located around the outer perimeter of the side plate. See [Figure 1F](#). Remove the 4 screws completely from the left side plate and set them aside. Remove the harness lug (or plug) from the frame and set it aside also.

Inspect the left side plate for the presence water or corrosion.

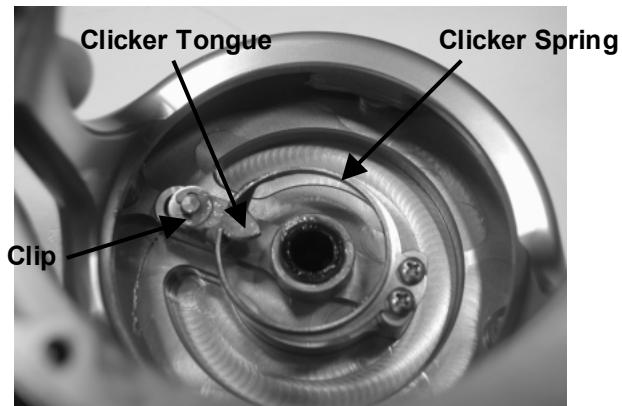
1.11 Cleaning and Lubricating the Inside of the Left Side Plate

Wipe clean any water or salt deposits you may find on the side plate or any of the parts attached to the side plate. Use a paper towel, rag or Q-Tip to absorb any standing water. Inspect the clicker tongue and spring for corrosion or the absence of grease. Remove the drag preset knob by unscrewing it in a counterclockwise direction. Inspect the threads of the knob for corrosion. Inspect the o-ring for nicks or breaks.

Check the operation of the clicker mechanism. Move the clicker button back and forth to be sure that it moves smoothly and freely. If it is sticky or stuck, disassemble the mechanism by removing the "C" clip from the stem of the clicker button. Refer to [Figure 1G](#). Push the clicker button stem out of the clicker tongue and remove it from the side plate. There are two nylon washers in the assembly – one under the clicker tongue on the inside of the side plate, and a larger one under the clicker button head on the outside of the side plate. Clean the slot and the parts and reassemble it with some grease on the button stem.



1F

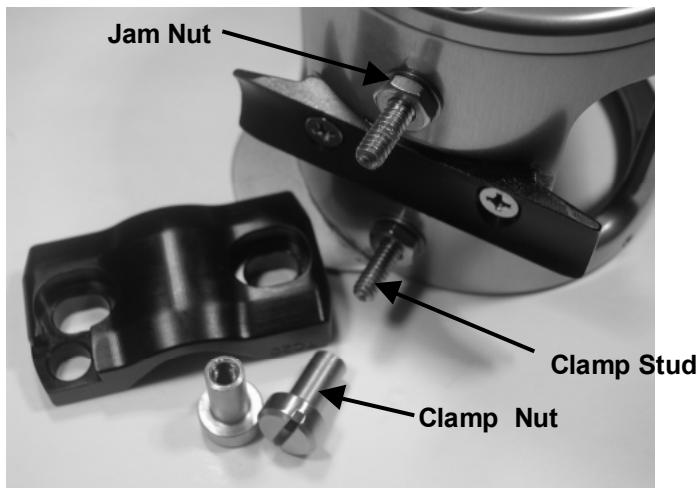


1G

Use a light oil or corrosion preventative lubricant to coat the inside of the side plate. This light coating of oil will serve as a corrosion barrier and help displace any water that may enter the reel. Apply the oil with a brush or swab. Apply a generous amount of grease to the clicker tongue and spring where the two parts mate.

1.12 Servicing the Clamp Assembly

Remove the clamp nuts from the clamp studs and inspect for water or corrosion. Refer to [Figure 1H](#). Clean and dry the studs and nuts. Check to make sure that the clamp studs are installed correctly in the frame. The “upper” ends of the studs should be flush with the inside surface of the reel frame and should not protrude beyond this point. If the studs protrude past the inside surface of the frame, they can cause damage to the line and possibly to the spool. Lock the clamp studs in place with the two #10 hex jam nuts. Tighten them against the frame until the studs are secure. Apply grease or light oil to the threads of the clamp studs before reinstalling the clamp nuts.



1H

Smart Shift™ Reels

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Changing the Drag Element

Section 2.0

2.1 Removing the Spool

The drag element in the Smart Shift Reel is located in the right side of the spool. The spool can be removed from the reel from either the right or left side, but we recommend to remove it from the right side of the reel. Remove the 4 screws completely from the right side plate and set them aside. See [Figure 2A](#).

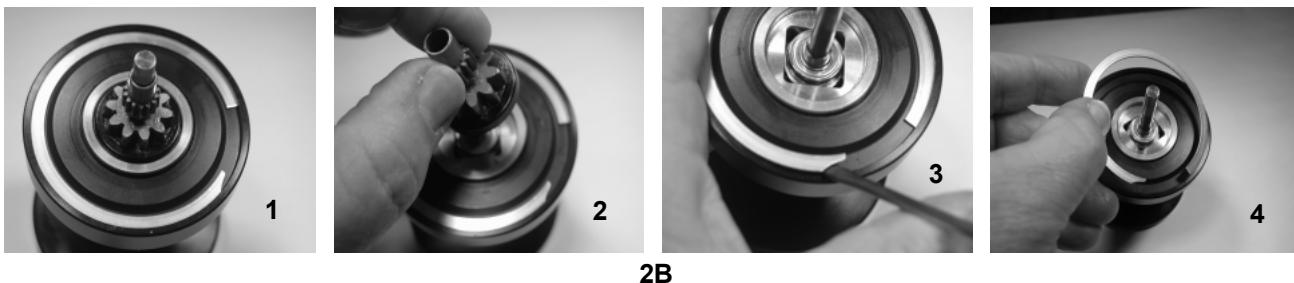
Remove the harness lug (or plug) from the frame and set it aside also.

Lift the right side plate off of the reel frame to expose the spool. Lift the spool out of the frame. NOTE: When you separate the right side plate assembly from the frame, the pinion gear may come out of the spool and remain in the side plate engaged to the other gears in the transmission. The pinion gear will otherwise remain engaged with the spool. With the exception of the side plate screws and harness lug, the pinion gear is the only part that should be "free" after you remove the side plate assembly.

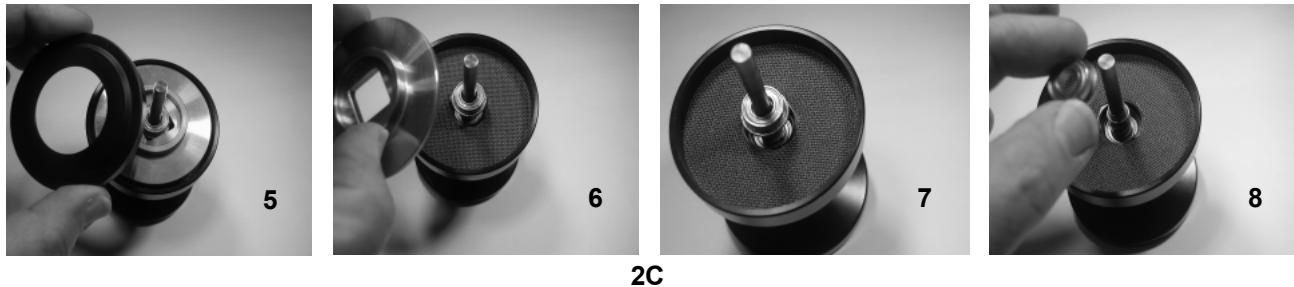


2.2 Disassembling the Drag Assembly

If the pinion gear is still in the end of the spool, remove it by pulling it out of the drag plate, refer to [Figure 2B, step 2](#). Use a small flat blade screwdriver or an awl to pry the drag cover retaining ring out of the ring groove. Once you get it started, it should come all of the way out of the groove by hand. Refer to [Figure 2B, steps 3 and 4](#).



Remove the drag cover, drag plate, pinion bearing and drag plate spring. Note that the flange on the pinion bearing faces the drag element when it is installed properly. Refer to [Figure 2C, steps 7 and 8](#).



2.3 Replacing the Drag Element

There is a raised boss in the center of the spool that engages the drag element. In Smart Shift model SST8/50 and SST12/50 reels, the boss is octagonal in shape. It is hexagonal in shape in SST16/80, SST20/80 and SST30/80 reels. Note that there is a small notch cut into one of the flats on the boss. Insert the point of a small flat blade screwdriver or hook scribe into the notch, and push it under the carbon drag element. Refer to Figure 2D. Gently lift the drag element up and away from the boss. The fit between the boss and the drag element is fairly tight and may take a bit of prying to free the element.



2D

Remove the drag element from the spool and inspect it for wear. Both sides of the drag element are useable in Smart Shift reels. If one side is worn and the other is new, turn the element over with the worn side against the spool and place it back into the spool. Line up the flats on the sides of the center hole in the element with the flats on the boss in the center of the spool. Press the element down so that it fits tight against the surface of the end of the spool. Use a small block of wood or a plastic mallet to tap the element down making sure that it is well seated.

Replace all of the parts back in the reverse order in which you removed them. Start with the drag plate spring first, then the pinion bearing second, making sure that the flange on the bearing is facing the drag element. Next, place the drag plate over the bearing with the flat side facing the drag element. Place the drag cover over the drag plate and hold it down tight while reinstalling the drag cover retainer. Push the retainer into the groove all of the way around the inside circumference of the spool making sure that it is secure. Slide the pinion gear over the spool shaft and line up the square drive hub on the end of the pinion gear with the square hole in the drag plate. Press it down into the drag plate until it bottoms out. Replace the side plate, harness lug and screws.

NOTE: In Smart Shift SST8/50 and SST12/50 models, the pinion gear and the square drive hub on the pinion are two separate parts. Sometimes the hub will separate from the pinion. If this occurs, simply press the square hub into the drag plate without the pinion gear. Once the hub is in place, you can place the pinion gear into the hub.

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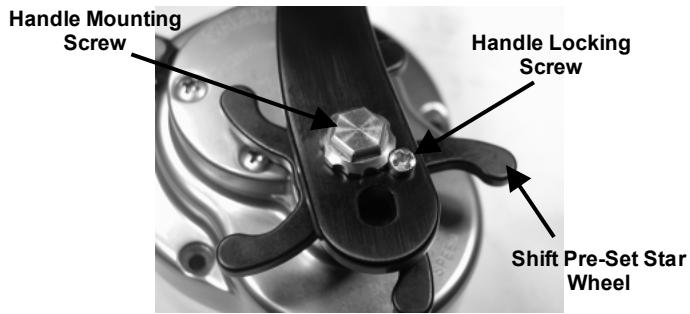
Servicing the Smart Shift Transmission

Section 3.0

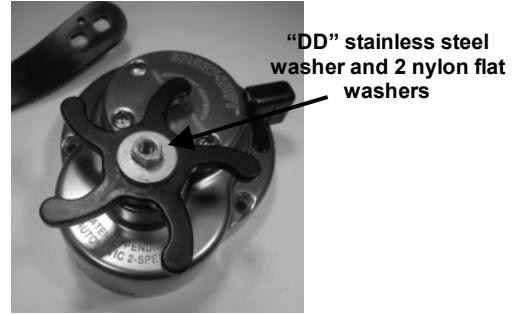
3.1 Disassembling the SST Transmission

Remove the four right side plate screws and harness lug (or plug) with a #2 Phillips screwdriver. The side plate screws are located around the outer perimeter of the side plate.

Set the right side plate assembly "handle up" on the workbench and remove the handle locking screw. Use a 3/8" wrench or nut driver to remove the handle mounting screw and the T-Bar handle. See [Figure 3A](#).



3A



3B

Note the three washers located under the handle in [Figure 3B](#). Record the order in which they are stacked on the reel as you remove them. The top washer is a stainless steel "DD" washer that locks onto the handle drive shaft. Below it are two 3/8" flat nylon washers. Remove the shift pre-set star wheel by unscrewing it in a counterclockwise direction.

Under the shift pre-set star wheel is a stack of 7 pre-set washers. See [Figures 3C and 3D](#). Note the order of the washers in the stack. Beginning with the top washer, or the one nearest to the underside of the pre-set star wheel, and working down to the side plate, the pre-set washers will come off of the reel in the following order:

- # 1 - 3/8" I.D. nylon flat washer
- # 2 - 3/8" I.D. stainless steel flat washer
- # 3 - 3/8" I.D. stainless steel Belvelle washer (cup side down)
- # 4 - 3/8" I.D. stainless steel Belvelle washer (cup side up)
- # 5 - 3/8" I.D. stainless steel flat washer
- # 6 - 3/8" I.D. stainless steel flat washer
- # 7 - 1/2" I.D. nylon flat washer



3C



3D

Inspect all of the washers that you have just removed including the three washers under the handle between the handle lever arm and the star wheel. Pay particular attention to the condition of the nylon washers making sure that they are not deformed or torn. Replace any deformed washers with new ones.

From the inside of the right side plate, remove the low speed drive gear assembly. The drive disc and the drive disc cone spring should come out with the assembly.

Remove the stainless steel clutch washer, the first carbon clutch element, the bronze high speed gear and the second carbon clutch element. Inspect and clean each component as you remove them from the transmission assembly. There should be some black carbon dust present in the assembly. This is normal. Clean off any excess amounts of unwanted grease from the surfaces of the clutch elements, gears and clutch washer.

Remove the drive sleeve by pushing on it from the outside of the side plate and pulling on it from the inside. The fit of the drive sleeve in the drive sleeve bearings may be a light press and require some pressure to get it out.

Inspect the drive sleeve bearings.. If the drive sleeve bearings require service, remove them by pressing them out of the side plate. There are two bearings and one bearing spacer in the stack. See to Figures 3E & 3F Check the bearings for smoothness by rolling them between your fingers. If they are rough or stiff, you will be able to feel it. If the bearings are bad, it is better to replace them rather than to try to service them. Press the two bearings and the spacer back into the bearing bore.



3E



3F

3.2 Servicing the Cam System

The drag cam is located under the drag lever cover on the right hand side of the reel. If you have removed the transmission from the reel, you can remove the cam from the inside of the right side plate. If you have not removed the transmission, the cam may be removed from the reel from the outside of the right side plate.

To remove the cam from the inside of the right side plate with the transmission removed, rotate the drag lever to the strike position against the strike button. On SST8/50 and SST12/50 reels, there will be a cam pinion bushing in the center of the cam bearing. Remove it as shown in Figure 3G. Lift the cam and bearing out of the side plate. You can use a pair of needle-nose pliers to grasp the cam or hook scribe to hook the cam bearing from inside the bearing hole. See Figure 3H & 3I. The cam should not be tight in the hole.



3G



3H



3I

The cam bearing fits snugly in the cam. It will usually not come out of the cam easily. You can check it by placing your fingertip over the inner race of the bearing and turning it back and forth with pressure applied. If the bearing is bad, it will feel rough. If it is Ok, there is no reason to remove it from the cam. The bearing is sealed and cannot be lubed without breaking the seals.

To remove the bearing from the cam, use a hook scribe or other stiff right angle tool that will fit into the bearing hole and allow you to get the end of it under the bearing. Pull the bearing out of the cam with the hook.

To reinstall the cam, rotate the drag lever to the strike position against the strike button. Lube the inside of the cam bushing and the pins and key in the bottom of the cam hole with grease. line up the slot in the end of the cam with the key in the bottom of the cam bushing hole and drop the cam in the hole. Press on the cam with your thumb as you slowly move the drag lever back to frees-pool position. The cam should drop all the way into the hole and work freely when you move the lever.

To remove the cam from outside of the right side plate, the handle must first be removed from the reel. Remove the shift pre-set star wheel by unscrewing it in a counterclockwise direction. Loosen and remove the three Phillips head screws from the drag lever cover plate. See Figure 3J. Remove the cover plate.

Note the position of the slot in the end of the cam when you remove the plate. This slot lines up with the key on the inside of the cover plate, and must line up in order to reassemble. Lift the drag lever and the cam out of the cam bushing. Note the position of the red colored thrust washer in Figure 3K. The thrust washer must be located in the bore in the end of the drag lever before replacing the cover plate.



3J



3K



3L

3.3 Inspecting and Servicing the Clutch Elements

Check both of the clutch elements for wear and grease contamination. The clutch elements are made of the same carbon material as the drag element and function in the same way. Too much grease will degrade the efficiency of the system. Clean the elements with a paper towel or clean rag. Do not use any solvents. If the elements are glazed or worn, replace them.

3.4 Re-assembling the SST Transmission

IMPORTANT NOTE: Before beginning the following transmission installation in the SST8/50 and SST12/50 reels, be sure the pinion bushing is in place in the center bore of the cam bearing. There is no cam bushing in the SST16/80, 20/80 or 30/80 reel. Refer to Figure 3G.



1

Install the drive sleeve making sure it engages with both anti-reverse dogs.



2

Install the first carbon clutch element.



3

Install the bronze high speed drive gear.



4
Install the second carbon clutch element.



5
Install stainless steel clutch washer.



6
Install the drive disc and spring on the low speed gear assembly.

Note step 6 above: The 6 pins on the drive disc must engage the slots in the low speed drive gear. Make sure that the drive disc spring fits snug around the step in the top of the drive disc so that it will stay in place. This will be critical in the next step of the installation. Lubricate the drive disc bore where it mates with the flats on the hub with one or two drops of light oil.



7
Install the low speed gear assembly.



8
Install the shift pre-set washers onto the drive shaft. Begin with washer #7 on the bottom against the side plate.

Note step 7 above: The tabs on the drive disc hub in the low speed gear assembly must be fully engaged with the slots in the drive sleeve. If the low speed gear assembly does not fully engage with the drive sleeve, it is not aligned properly. While lightly pressing on the gear, rotate the gear clockwise until the tabs on the drive disc hub engage with the slots in the drive sleeve. You will not be able to see the tabs line up with the slots, so the alignment is done entirely by feel.

STEP 8 – Install the Shift Pre-Set Washers. While holding the low speed gear assembly in place, install the 7 pre-set washers in the reverse order in which they were removed. Refer step 8 above. Start by placing the $\frac{1}{2}$ " I.D. nylon washer (# 7) over the drive shaft and down onto the side plate. Follow with the 2 stainless steel flat washers (# 6 & # 5). Install the 2 cupped Belville washers (# 4 & # 3). Be sure the Belville washers are stacked cup to cup. Finish off the washer stack with another stainless steel flat washer (# 2) and then the $\frac{3}{8}$ " I.D. nylon flat washer (# 1).

- # 7 - $\frac{1}{2}$ " I.D. nylon flat washer
- # 6 - $\frac{3}{8}$ " I.D. stainless steel flat washer
- # 5 - $\frac{3}{8}$ " I.D. stainless steel flat washer
- # 4 - $\frac{3}{8}$ " I.D. stainless steel Belville washer (cup side up)
- # 3 - $\frac{3}{8}$ " I.D. stainless steel Belville washer (cup side down)
- # 2 - $\frac{3}{8}$ " I.D. stainless steel flat washer
- # 1 - $\frac{3}{8}$ " I.D. nylon flat washer

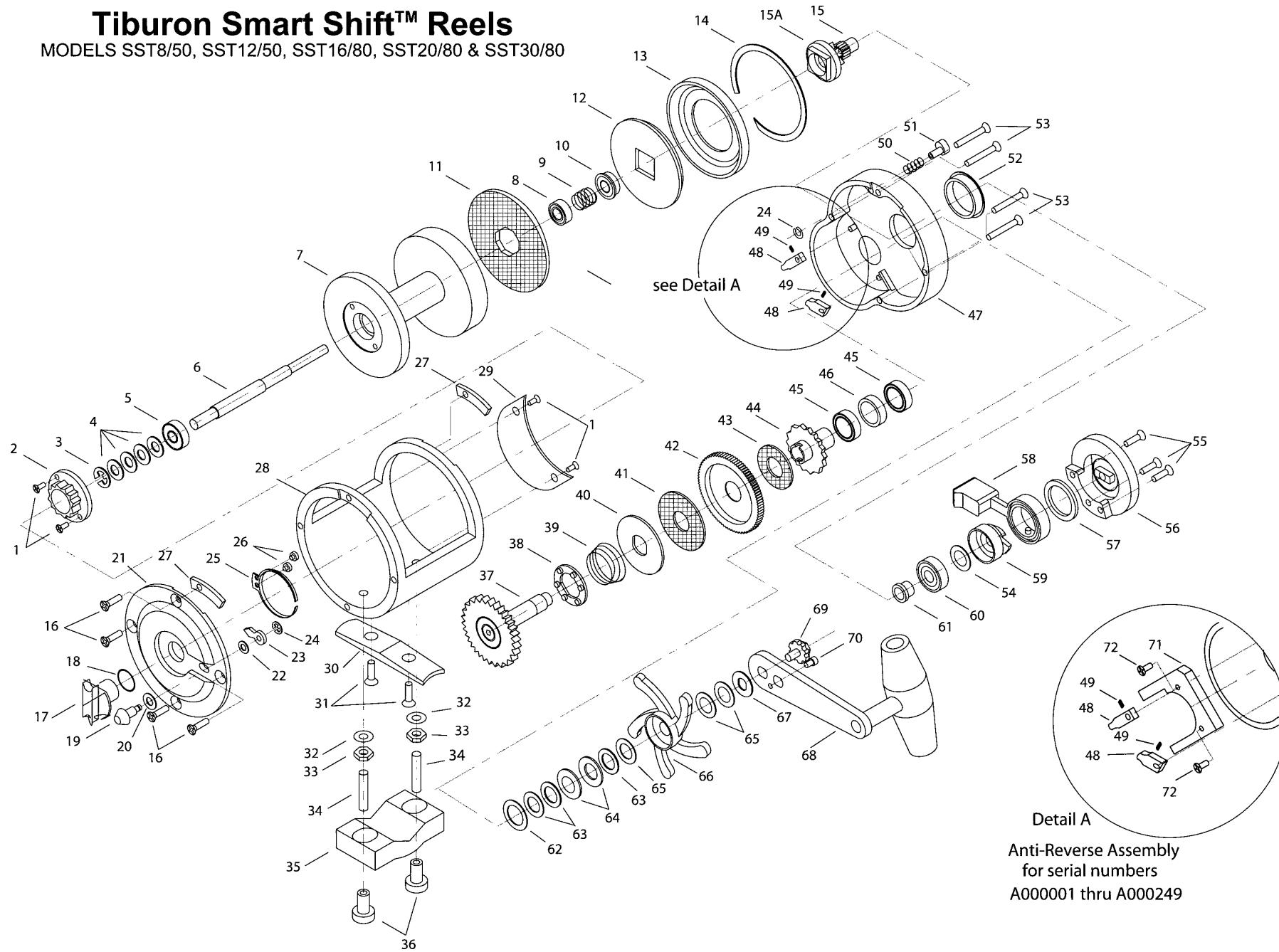
STEP 9 – Install the Shift Pre-Set Star Wheel. Thread the star wheel onto the drive shaft in a clockwise rotation. Prevent the drive shaft from turning by holding the gears in the transmission with your fingers, and tighten the star wheel firmly.

STEP 10 – Install the Handle Washers. Place 2 each 3/8" nylon handle washers over the end of the drive shaft against the star wheel. Lining up the flats in the washer and the flats on the drive shaft, place the "DD" Stainless steel flat washer over the end of the drive shaft.

STEP 11 – Install the T-Bar Handle. Install the handle in the desired mounting hole position. Use the handle for leverage and tighten the pre-set star wheel about a quarter turn. This will ensure that the star wheel is down low enough to allow the handle "DD" washer to seat properly on the drive shaft. Install the handle mounting screw and tighten it with a 3/8" nut driver or box wrench. Be sure that one of the notches in the side of the mounting screw lines up with the center of the handle locking screw hole. Install the handle locking screw.

Tiburon Smart Shift™ Reels

MODELS SST8/50, SST12/50, SST16/80, SST20/80 & SST30/80



Tiburon Smart Shift™ SST8/50 Reel

Parts List

REF	PN	PART NAME
1	128	Screw, Clicker / Gear Housing
2	127	Clicker Gear
3	125	Retaining Clip, Spool Shaft
4	122	Belvelle Washer, Spool Shaft
5	123	Spool Bearing - Clicker End
6	121	SST8/50 Spool Shaft
7	126	SST8/50 Spool
8	124	Spool Bearing - Drag End
9	129	Drag Plate Return Spring
10	134	Pinion Gear Bearing
11	130	Drag Element, 3/0 Series
12	131	Drag Plate, 3/0 Series
13	132	Drag Cover, 3/0 Series
14	133	Drag Cover Retainer, 3/0 Series
15	135	Pinion Gear, 3/0 Series
15A	245	Pinion Gear Hub
16	181	Left Side Plate Screws
17	102	Drag Preset Knob
18	103	Drag Preset Knob O-Ring
19	106	Clicker Button
20	108	Clicker Washer - large
21	100	Left Side Plate, 3/0 Series
22	109	Clicker Washer - small
23	107	Clicker Tongue
24	110	Retaining Clip
25	104	Clicker Spring
26	105	Clicker Spring Screw
27	183	Harness Plug
28	111	SST8/50 Frame
29	112	Gear Housing Cover, 3/0 series
30	114	Reel Frame Base
31	115	Reel Base Screw
32	117	Clamp Stud Washer
33	118	Clamp Stud Jam Nut
34	116	7/8" Clamp Stud, 3/0 Series
35	119	Reel Clamp
36	120	Reel Clamp Nut

REF	PN	PART NAME
37	248	Low Speed Gear Assm., 3/0 Series
38	141	Drive Disc
39	142	Drive Disc Spring
40	173	High Speed Clutch Washer
41	171	Clutch Element - large
42	172	High Speed Gear, 3/0 Series
43	170	Clutch Element - small
44	155	Drive Sleeve
45	147	Drive Sleeve Bearing
46	148	Drive Sleeve Bearing Spacer
47	145	Right Side Plate, 3/0 Series
48	153	Anti Reverse Dog
49	154	Anti Reverse Dog Spring
50	157	Strike Button Spring
51	156	Strike Button
52	149	Cam Bushing
53	184	SST Right Side Plate Screw
54	252	Cam Shim
55	152	Drag Lever Cover screws
56	151	SST Drag Lever Cover
57	150	Drag Lever Thrust Washer
58	143	Drag lever, 3/0 Series
59	167	Cam, 3/0 Series
60	168	Cam bearing
61	169	Pinion Gear Bushing
62	250	1/2" Nylon Flat Washer
63	174	3/8" SS Flat Washer
64	175	Shift Preset Belvelle Washer
65	176	3/8" Nylon Flat Washer
66	177	Shift Preset Star Wheel
67	178	Handle Lever Arm "DD" Washer
68	249	SST Handle Assembly
69	179	Handle Mounting Screw
70	180	Handle Locking Screw
71	250	Dog Spring Adapter
72	251	Dog Spring Adapter Screw

SST8/50 parts list

Tiburon Smart Shift™ SST12/50 Reel

Parts List

REF	PN	PART NAME
1	128	Screw, Clicker / Gear Housing
2	127	Clicker Gear
3	125	Retaining Clip, Spool Shaft
4	122	Belvelle Washer, Spool Shaft
5	123	Spool Bearing - Clicker End
6	189	SST12/50 Spool Shaft
7	190	SST12/50 Spool
8	124	Spool Bearing - Drag End
9	129	Drag Plate Return Spring
10	134	Pinion Gear Bearing
11	130	Drag Element, 3/0 Series
12	131	Drag Plate, 3/0 Series
13	132	Drag Cover, 3/0 Series
14	133	Drag Cover Retainer, 3/0 Series
15	135	Pinion Gear, 3/0 Series
15A	245	Pinion Gear Hub
16	181	Left Side Plate Screws
17	102	Drag Preset Knob
18	103	Drag Preset Knob O-Ring
19	106	Clicker Button
20	108	Clicker Washer - large
21	100	Left Side Plate, 3/0 Series
22	109	Clicker Washer - small
23	107	Clicker Tongue
24	110	Retaining Clip
25	104	Clicker Spring
26	105	Clicker Spring Screw
27	183	Harness Plug
28	188	SST12/50 Frame
29	112	Gear Housing Cover, 3/0 series
30	114	Reel Frame Base
31	115	Reel Base Screw
32	117	Clamp Stud Washer
33	118	Clamp Stud Jam Nut
34	116	7/8" Clamp Stud, 3/0 Series
35	119	Reel Clamp
36	120	Reel Clamp Nut

SS12 parts list

REF	PN	PART NAME
37	248	Low Speed Gear Assm., 3/0 Series
38	141	Drive Disc
39	142	Drive Disc Spring
40	173	High Speed Clutch Washer
41	171	Clutch Element - large
42	172	High Speed Gear, 3/0 Series
43	170	Clutch Element - small
44	155	Drive Sleeve
45	147	Drive Sleeve Bearing
46	148	Drive Sleeve Bearing Spacer
47	145	Right Side Plate, 3/0 Series
48	153	Anti Reverse Dog
49	154	Anti Reverse Dog Spring
50	157	Strike Button Spring
51	156	Strike Button
52	149	Cam Bushing
53	184	SST Right Side Plate Screw
54	252	Cam Shim
55	152	Drag Lever Cover screws
56	151	SST Drag Lever Cover
57	150	Drag Lever Thrust Washer
58	143	Drag lever, 3/0 Series
59	167	Cam, 3/0 Series
60	168	Cam bearing
61	169	Pinion Gear Bushing
62	250	1/2" Nylon Flat Washer
63	174	3/8" SS Flat Washer
64	175	Shift Preset Belvelle Washer
65	176	3/8" Nylon Flat Washer
66	177	Shift Preset Star Wheel
67	178	Handle Lever Arm "DD" Washer
68	249	SST Handle Assembly
69	179	Handle Mounting Screw
70	180	Handle Locking Screw
71	250	Dog Spring Adapter
72	251	Dog Spring Adapter Screw

Tiburon Smart Shift™ SST16/80 Reel

Parts List

REF	PN	PART NAME
1	128	Screw, Clicker / Gear Housing
2	127	Clicker Gear
3	125	Retaining Clip, Spool Shaft
4	122	Belville Washer, Spool Shaft
5	123	Spool Bearing - Clicker End
6	194	SST16/80 Spool Shaft
7	195	SST16/80 Spool
8	124	Spool Bearing - Drag End
9	129	Drag Plate Return Spring
10	134	Pinion Gear Bearing
11	196	Drag Element, 4/0 Series
12	197	Drag Plate, 4/0 Series
13	198	Drag Cover, 4/0 Series
14	199	Drag Cover Retainer, 4/0 Series
15	200	Pinion Gear, 4/0 Series
16	181	Left Side Plate Screws
17	102	Drag Preset Knob
18	103	Drag Preset Knob O-Ring
19	106	Clicker Button
20	108	Clicker Washer - large
21	101	Left Side Plate, 4/0 Series
22	109	Clicker Washer - small
23	107	Clicker Tongue
24	110	Retaining Clip
25	104	Clicker Spring
26	105	Clicker Spring Screw
27	183	Harness Plug
28	192	SST16/80 Frame
29	193	Gear Housing Cover, 4/0 series
30	114	Reel Frame Base
31	115	Reel Base Screw
32	117	Clamp Stud Washer
33	118	Clamp Stud Jam Nut
34	244	1" Clamp Stud, 3/0 Series
35	119	Reel Clamp

REF	PN	PART NAME
36	120	Reel Clamp Nut
37	253	Low Speed Gear Assm., 4/0 Series
38	141	Drive Disc
39	142	Drive Disc Spring
40	173	High Speed Clutch Washer
41	171	Clutch Element - large
42	205	High Speed Gear, 4/0 Series
43	170	Clutch Element - small
44	155	Drive Sleeve
45	147	Drive Sleeve Bearing
46	148	Drive Sleeve Bearing Spacer
47	145	Right Side Plate, 3/0 Series
48	153	Anti Reverse Dog
49	154	Anti Reverse Dog Spring
50	157	Strike Button Spring
51	156	Strike Button
52	149	Cam Bushing
53	184	SST Right Side Plate Screw
54	252	Cam Shim
55	152	Drag Lever Cover screws
56	151	SST Drag Lever Cover
57	150	Drag Lever Thrust Washer
58	202	Drag lever, 4/0 Series
59	204	Cam, 4/0 Series
60	168	Cam bearing
62	250	1/2" Nylon Flat Washer
63	174	3/8" SS Flat Washer
64	175	Shift Preset Belville Washer
65	176	3/8" Nylon Flat Washer
66	177	Shift Preset Star Wheel
67	178	Handle Lever Arm "DD" Washer
68	249	SST Handle Assembly
69	179	Handle Mounting Screw
70	180	Handle Locking Screw

SST16/80 parts list

Tiburon Smart Shift™ SST20/80 Reel

Parts List

REF	PN	PART NAME
1	128	Screw, Clicker / Gear Housing
2	127	Clicker Gear
3	125	Retaining Clip, Spool Shaft
4	122	Belvelle Washer, Spool Shaft
5	123	Spool Bearing - Clicker End
6	208	SST20/80 Spool Shaft
7	209	SST20/80 Spool
8	124	Spool Bearing - Drag End
9	129	Drag Plate Return Spring
10	134	Pinion Gear Bearing
11	196	Drag Element, 4/0 Series
12	197	Drag Plate, 4/0 Series
13	198	Drag Cover, 4/0 Series
14	199	Drag Cover Retainer, 4/0 Series
15	200	Pinion Gear, 4/0 Series
16	181	Left Side Plate Screws
17	102	Drag Preset Knob
18	103	Drag Preset Knob O-Ring
19	106	Clicker Button
20	108	Clicker Washer - large
21	101	Left Side Plate, 4/0 Series
22	109	Clicker Washer - small
23	107	Clicker Tongue
24	110	Retaining Clip
25	104	Clicker Spring
26	105	Clicker Spring Screw
27	183	Harness Plug
28	207	SST20/80 Frame
29	193	Gear Housing Cover, 4/0 series
30	114	Reel Frame Base
31	115	Reel Base Screw
32	117	Clamp Stud Washer
33	118	Clamp Stud Jam Nut
34	244	1" Clamp Stud, 3/0 Series
35	119	Reel Clamp

REF	PN	PART NAME
36	120	Reel Clamp Nut
37	253	Low Speed Gear Assm., 4/0 Series
38	141	Drive Disc
39	142	Drive Disc Spring
40	173	High Speed Clutch Washer
41	171	Clutch Element - large
42	205	High Speed Gear, 4/0 Series
43	170	Clutch Element - small
44	155	Drive Sleeve
45	147	Drive Sleeve Bearing
46	148	Drive Sleeve Bearing Spacer
47	145	Right Side Plate, 3/0 Series
48	153	Anti Reverse Dog
49	154	Anti Reverse Dog Spring
50	157	Strike Button Spring
51	156	Strike Button
52	149	Cam Bushing
53	184	SST Right Side Plate Screw
54	252	Cam Shim
55	152	Drag Lever Cover screws
56	151	SST Drag Lever Cover
57	150	Drag Lever Thrust Washer
58	202	Drag lever, 4/0 Series
59	204	Cam, 4/0 Series
60	168	Cam bearing
62	250	1/2" Nylon Flat Washer
63	174	3/8" SS Flat Washer
64	175	Shift Preset Belvelle Washer
65	176	3/8" Nylon Flat Washer
66	177	Shift Preset Star Wheel
67	178	Handle Lever Arm "DD" Washer
68	249	SST Handle Assembly
69	179	Handle Mounting Screw
70	180	Handle Locking Screw

SST20/80 parts list

Tiburon Smart Shift™ SST30/80 Reel

Parts List

REF	PN	PART NAME
1	128	Screw, Clicker / Gear Housing
2	127	Clicker Gear
3	125	Retaining Clip, Spool Shaft
4	122	Belville Washer, Spool Shaft
5	123	Spool Bearing - Clicker End
6	212	SST30/80 Spool Shaft
7	213	SST30/80 Spool
8	124	Spool Bearing - Drag End
9	129	Drag Plate Return Spring
10	134	Pinion Gear Bearing
11	196	Drag Element, 4/0 Series
12	197	Drag Plate, 4/0 Series
13	198	Drag Cover, 4/0 Series
14	199	Drag Cover Retainer, 4/0 Series
15	200	Pinion Gear, 4/0 Series
16	181	Left Side Plate Screws
17	102	Drag Preset Knob
18	103	Drag Preset Knob O-Ring
19	106	Clicker Button
20	108	Clicker Washer - large
21	101	Left Side Plate, 4/0 Series
22	109	Clicker Washer - small
23	107	Clicker Tongue
24	110	Retaining Clip
25	104	Clicker Spring
26	105	Clicker Spring Screw
27	183	Harness Plug
28	211	SST30/80 Frame
29	193	Gear Housing Cover, 4/0 series
30	114	Reel Frame Base
31	115	Reel Base Screw
32	117	Clamp Stud Washer
33	118	Clamp Stud Jam Nut
34	244	1" Clamp Stud, 3/0 Series
35	119	Reel Clamp

REF	PN	PART NAME
36	120	Reel Clamp Nut
37	253	Low Speed Gear Assm., 4/0 Series
38	141	Drive Disc
39	142	Drive Disc Spring
40	173	High Speed Clutch Washer
41	171	Clutch Element - large
42	205	High Speed Gear, 4/0 Series
43	170	Clutch Element - small
44	155	Drive Sleeve
45	147	Drive Sleeve Bearing
46	148	Drive Sleeve Bearing Spacer
47	145	Right Side Plate, 3/0 Series
48	153	Anti Reverse Dog
49	154	Anti Reverse Dog Spring
50	157	Strike Button Spring
51	156	Strike Button
52	149	Cam Bushing
53	184	SST Right Side Plate Screw
54	252	Cam Shim
55	152	Drag Lever Cover screws
56	151	SST Drag Lever Cover
57	150	Drag Lever Thrust Washer
58	202	Drag lever, 4/0 Series
59	204	Cam, 4/0 Series
60	168	Cam bearing
62	250	1/2" Nylon Flat Washer
63	174	3/8" SS Flat Washer
64	175	Shift Preset Belville Washer
65	176	3/8" Nylon Flat Washer
66	177	Shift Preset Star Wheel
67	178	Handle Lever Arm "DD" Washer
68	249	SST Handle Assembly
69	179	Handle Mounting Screw
70	180	Handle Locking Screw

SST30/80 parts list

Tiburon Smart Shift™ Parts Price List

PN	PART NAME	PRICE
100	Left Side Plate, 3/0 Series	\$42.00
101	Left Side Plate, 4/0 Series	\$42.00
102	Drag Preset Knob	\$19.00
103	Drag Preset Knob O-Ring	\$1.00
104	Clicker Spring	\$3.00
105	Clicker Spring Screw	\$0.50
106	Clicker Button	\$10.00
107	Clicker Tongue	\$2.00
108	Clicker Washer - large	\$0.50
109	Clicker Washer - small	\$0.50
110	Retaining Clip	\$1.00
111	SST8/50 Frame	\$75.00
112	Gear Housing Cover, 3/0 series	\$6.00
114	Reel Frame Base	\$6.00
115	Reel Base Screw	\$0.50
116	7/8" Clamp Stud, 3/0 Series	\$0.50
117	Clamp Stud Washer	\$0.50
118	Clamp Stud Jam Nut	\$0.50
119	Reel Clamp	\$15.00
120	Reel Clamp Nut	\$8.00
121	SST8/50 Spool Shaft	\$12.00
122	Belvelle Washer, Spool Shaft	\$1.50
123	Spool Bearing - Clicker End	\$10.00
124	Spool Bearing - Drag End	\$10.00
125	Retaining Clip, Spool Shaft	\$0.50
126	SST8/50 Spool	\$55.00
127	Clicker Gear	\$9.00
128	Screw, Clicker / Gear Housing	\$0.50
129	Drag Plate Return Spring	\$6.00
130	Drag Element, 3/0 Series	\$10.00
131	Drag Plate, 3/0 Series	\$24.00
132	Drag Cover, 3/0 Series	\$8.00
133	Drag Cover Retainer, 3/0 Series	\$3.00
134	Pinion Gear Bearing	\$12.00
135	Pinion Gear, 3/0 Series	\$36.00
141	Drive Disc	\$12.00
142	Drive Disc Spring	\$4.00
143	Drag lever, 3/0 Series	\$20.00
145	Right Side Plate, 3/0 Series	\$66.00
147	Drive Sleeve Bearing	\$18.00
148	Drive Sleeve Bearing Spacer	\$4.00
149	Cam Bushing	\$8.00
150	Drag Lever Thrust Washer	\$2.00
151	SST Drag Lever Cover	\$26.00
152	Drag Lever Cover screws	\$0.50
153	Anti Reverse Dog	\$6.00
154	Anti Reverse Dog Spring	\$3.00
155	Drive Sleeve	\$30.00

PN	PART NAME	PRICE
156	Strike Button	\$6.00
157	Strike Button Spring	\$3.00
167	Cam, 3/0 Series	\$32.00
168	Cam bearing	\$16.00
169	Pinion Gear Bushing	\$6.00
170	Clutch Element - small	\$4.00
171	Clutch Element - large	\$4.00
172	High Speed Gear, 3/0 Series	\$30.00
173	High Speed Clutch Washer	\$4.00
174	3/8" SS Flat Washer	\$0.50
175	Shift Preset Belleville Washer	\$2.00
176	3/8" Nylon Flat Washer	\$0.50
177	Shift Preset Star Wheel	\$12.00
178	Handle Lever Arm "DD" Washer	\$1.00
179	Handle Mounting Screw	\$7.00
180	Handle Locking Screw	\$2.00
181	Left Side Plate Screws	\$0.50
183	Harness Plug	\$4.00
184	SST Right Side Plate Screw	\$0.50
188	SST12/50 Frame	\$75.00
189	SST12/50 Spool Shaft	\$12.00
190	SST12/50 Spool	\$55.00
192	SST16/80 Frame	\$75.00
193	Gear Housing Cover, 4/0 Series	\$6.00
194	SST16/80 Spool Shaft	\$12.00
195	SST16/80 Spool	\$55.00
196	Drag Element, 4/0 Series	\$10.00
197	Drag Plate, 4/0 Series	\$24.00
198	Drag Cover, 4/0 Series	\$8.00
199	Drag Cover Retainer, 4/0 Series	\$3.00
200	Pinion Gear, 4/0 Series	\$36.00
202	Drag lever, 4/0 Series	\$20.00
204	Cam, 4/0 Series	\$32.00
205	High Speed Gear, 4/0 Series	\$30.00
207	SST20/80 Frame	\$75.00
208	SST20/80 Spool Shaft	\$12.00
209	SST20/80 Spool	\$55.00
211	SST30/80 Frame	\$75.00
212	SST30/80 Spool Shaft	\$12.00
213	SST30/80 Spool	\$55.00
244	Clamp Stud, 4/0 Series	\$0.50
245	Pinion Gear Hub	\$20.00
248	Low Speed Gear Assm., 3/0 Ser	\$71.00
249	SST Handle Assembly	\$55.00
250	Dog Spring Adapter	\$12.00
251	Dog Spring Adapter Screw	\$0.50
252	Cam Shim	\$1.00
253	Low Speed Gear Assm., 4/0 Ser	\$71.50

